

**GENERAL REQUIREMENTS  
FOR  
FIRE ALARM SYSTEM INSPECTION SERVICES  
FOR  
SOLID ROCKET BOOSTER ELEMENT FACILITIES AT  
KENNEDY SPACE CENTER, FL**

**1.1 General**

The Subcontractor shall provide quarterly, semiannually and annual inspection, The system consist of Seven Siemens FireFinder XLS Fire Alarm panels with voice controls, one extender panel with voice controls, one MXL panel with remote operation Box, Six VESDA Systems and Two NCC Station Monitors. The XLS panels communicate with two Station Monitors Via a fiber network system and the MXL panel is used to interface with central station from the Solid Rocket Booster Assembly and Refurbishment Facility (ARF) complex. The Subcontractor will provide real time service calls to troubleshoot, change out of miscellaneous parts, and make any and all necessary corrections and repairs. A complete inspection service reports shall include all supervision, labor, parts, materials, equipment, incidentals required to maintain the United Space Alliance (USA)/National Aeronautics Space Agency (NASA) owned Fire Alarm Systems per NFPA 72 2002 for the following buildings; reference appendix "A" for number of devices in each building.

<b><u>Facility Name</u></b>	<b><u>Facility Number</u></b>
Engineering and Administration Building	L6-146
Chiller Building	L6-147
Manufacturing Building	L6-247
GSE	L6-249
Service Buildings	L6-248
Multi Purpose Storage Facility	L6-297
AFT Skirt Test Facility	L7-251
Modular Office Building	TR3-034
Hazardous Waste Staging Facility	L6-295

## Appendix A

Bldg	Initiating	MXL	Speakers	Strobes	VESDA	NCC Station Monitors	Fiber Network
Node 1 E&A	108	1	65	96	2	1	1
Node 2 Chiller	29		13	15		1	1
Node 3 MOB	35		8	11			1
Manufacturing Building							1+HUB
Node 4 DLC 4 North	90		131	169	1		
Node 4 DLC 14 North	65						
Node 4 DLC 8 South	82				2		
Node 4 DLC 9 South	77						
Node 5 MPSF/ HWSF	56		51	60			1
Node 6 Service/GSE	19		10	12			1
Node 7 ASTF	53		8	10	1		1
<b>Total</b>	<b>614</b>		<b>286</b>	<b>373</b>	<b>6</b>	<b>2</b>	<b>7</b>

### 1.2 Responsibilities of the Subcontractor

- Upon notification from USA Solid Rocket Booster Element (SRBE) Facilities personnel of a failure, the Subcontractor will respond telephonically within one business hour to ensure understanding of the failure, building location and expected on-site arrival time. The Subcontractor is expected to respond on site for repairs before the end of shift the same day notification was made unless otherwise coordinated with the SRBE Facilities representative. In the case where notification is made after 12:00 p.m., the Subcontractor is expected to arrive on site no later than 8:00 am on the following business day and verify schedule with SRBE Facilities representative. Subcontractor shall furnish us a telephone number and e-mail address for 24/7 communications.
- The following items shall be tested quarterly: transient suppressors, Valve Tamper switches, Siemens fire alarm control panels, transponder communication system, Batteries sealed lead acid, Old Batteries will be left on site.
- The following items shall be tested semiannually: Sealed lead acid batteries, transient suppressors, Valve Tamper, Siemens fire alarm control panels, transponder communication system, Batteries sealed lead acid, water flow devices, IR detectors, VESDA systems.
- The following items shall be tested annually: Sealed lead acid batteries, Fuses, Interfaced equipment, lamps and LEDs, primary main power supply, transponders, Emergency voice/ alarm Communication equipment, transient suppressors, duct detectors, heat detectors, remote annunciators, alarm notification devices, XLS control panels and MXL panel, fiber communication system, manual pull stations, smoke detectors, water flow devices, valve tamper, transponder, elevator primary and secondary points, VESDA

systems, IR flame detectors, alarm notification devices and Clean IR detector lenses below 11 feet.

### **1.3 Subcontractor Employee Requirements**

- Employees of the Subcontractor and sub-tiers shall be U.S. citizens or have properly issued Green Card. All persons operating motor vehicles must have valid driver's license. All employees shall be issued Kennedy Space Center (KSC) badges, which shall be properly displayed at all times. Subcontractor service representative is required to have sufficient badged, non-escorted employees to support said contract. United Space Alliance will provide at no cost to the Subcontractor all training necessary to obtain said non-escort badging status.
- The Subcontractor employees shall be a minimum of a National Institute for Certification in Engineering Technologies (NICET) Level II certified reference NFPA 72 10.2.2.5. A copy of their employee's certification shall be filled with USA. Employee will be factor certified on MXL XLS and NCC system. A copy of their MXL, XLS, NCC training shall be on file with USA prior to them working at the ARF complex.
- Subcontractor service representative is required to have badged, non-escorted employees.
- Subcontractor shall provide factory trained NICET Level II-trained employee for testing, inspection and repairs.

### **1.4 Subcontractor Coordination**

Subcontractor shall coordinate work of all trades and supplies of materials necessary for completion of the work. Scheduling of work must be coordinated with USA SRBE Facilities Operations & Maintenance Department for minimum inconvenience to ongoing activities, ensuring no interruptions of critical operations. SRBE hours of operation are first shift 06:00 until 16:30 and second shift 16:00 until 02:30 each weekday. Cooperation with others is required during implementation of this Statement of Work. Regular hours for testing and repairs shall be determined by USA

- All service visits shall be regularly scheduled and agreed to by the Subcontractor and by USA SRBE. USA-SRBE schedule shift are First Shift from 0700 to 1530 and Second Shift from 1530 to 2400 hours. Service visits shall be coordinated with USA Facilities Planner, 321-867-9777 Facilities Manager at 321-867-2709 or Facilities Engineering Project Manager, at 321-867-9538. Any deviation from this schedule is permissible only by the approval of USA SRBE, not later than 48 hours in advance of the scheduled visit.
- Quarterly, semiannually and annual testing shall be scheduled by USA-SRBE. Regular testing of the fire alarm system will be scheduled for second

shift. Any deviation from this schedule is permissible only by the approval of USA SRBE. Not later than 48 hours in advance of the scheduled visit.

- USA shall provide the latest revision of drawings. These drawings sheets shall indicate locations of the Fire Alarm Control Panels (FACP) and all peripheral devices and notification appliances. Reference Appendix A for All Devices
- All repairs shall be corrected within 24 hours of the quarterly inspections, semiannually and annual inspection test report. After the subcontractor has performed repairs on the malfunctioning fire alarm system, retesting shall be performed per NFPA and a written report.

## 1.5 Spare Parts

The Subcontractor shall keep the following spare parts in stock and available for the repair of the USA-SRBE SRB-ARF Siemens XLS fire alarm system.

<u>MODEL #</u>	<u>NOMENCLATURE</u>	<u>QUANTITY</u>
PMI	XLS PMI control Card	1
PSC-12	12 Amp Power Supply	1
PSX-12	12 Amp Power Supply Extender	1
Dac-Net	Digital Audio Card	1
LPB	Local Page Board	1
LVM	Live Voice Module	1
FCM-6/	Control Module	1
LCM-8	Control Module Switch	1
ZAC-40	Zone Module Amplifier Card	1
NIC-C	Network Interface Card	1
D2300CP	Fiber Optic Interface Box	1
PS-5A	Power Supply	1
DLC	Device Loop Card	1
ZIC-4A	Zone Indicating Card	1
HFP-11/HFPT-11	Fire print/Thermal Detector	3
AD-11P/AD-11PR	Air Duct Monitor Housing	1
HTIR-M	Addressable Interface Module	4
HZM	Remote Conventional Zone Module	2
HTRI-S	Addressable Switch Interface Module	2
HTRI-D	Double Addressable S/Interface Module	2
HTRI-R	Addressable relay Interface Module	2
PAD-3	Distributed Power Module NAC Expander	1
S-LP	Red Speaker w/ MCs Strobe	2
U-MCS	Red Stand Alone Strobe	2
S-HP	Speaker/ strobe Weather proof	3
DRDC -7	Silicon Surge Suppression	2
DRDC-24	Silicon Surge Suppression	2
DTK-2MHLP-24	Signal Surge Protector	1
DTK-2MHLP-70	Signal Surge Protector	1
VLf-250	VESDA Filter	5
VSP-005	VESDA Filter	1